

ANTISENSE THERAPEUTICS

23 May 2005

Securities and Exchange Commission
Judiciary Plaza
450 Fifth Street
Washington DC 20549
UNITED STATES OF AMERICA





Dear Sir/Madam

Re: Antisense Therapeutics Limited

Please find attached copies of the following announcements lodged with the Australian Stock Exchange (ASX):

Date of Announcement/Lodgement	To:	Title	No of pages
18 May 2005	ASX	Investor Update	-4
23 May 2005	ASX	Asthma Data presented at American Thoracic Society Meeting	2

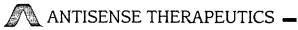
Yours sincerely

Natalie Korchev

Company Secretary

Encl.





MAY 2005

In This Update

- Clinical studies review ATL1102 for MS and ATL1101 for Psoriasis
- Product development pipeline
 - o ATL1102 for Asthma
 - ATL1103 for Growth and Sight disorders
- · Background information

Overview

The team at Antisense Therapeutics has worked diligently in recent months to advance clinical programs and progress the company's pipeline projects. This includes the establishment of an experienced and well credentialed Medical Advisory Board to further investigate and provide guidance on possible development paths for ATL1102 as a potential therapeutic agent in Multiple Sclerosis (MS). Additionally, the Company has progressed its Proof of Concept study of ATL1101 as a therapeutic agent in patients with psoriasis with enrolment completed and dosing commenced. Research has continued on the company's pipeline projects aimed at potential treatments for asthma, acromegaly and sight disorders.

The company reported a cash balance of A\$9.4 million as at 31 March 2005.

Clinical Studies Review

ATL1102 for MS: Medical Advisory Board established to assess development path

On 10 March, 2005, Antisense Therapeutics announced that in light of the safety issues associated with the multiple sclerosis drug Tysabri®, it had voluntarily halted its Phase 2a trial of ATL1102 in MS patients and would convene an advisory group of relevant experts to consider the potential development paths for ATL1102 in this disease, including the possible restart of the Phase 2a program.

While ATL1102 is a different drug to Tysabri® and works by a different mechanism (antisense), the relevance of the Tysabri® issue to Antisense Therapeutics is that ATL1102 is designed to target the same immune system protein (VLA-4) as Tysabri®. On 28 February 2005, Biogen Idec and Elan Corporation announced that they had voluntarily suspended marketing of Tysabri® from the U.S. market and dosing in all ongoing clinical trials. This decision was based on 2 reported cases of progressive multifocal leukoencephalopathy (PML), a rare and frequently fatal, demyelinating disease of the central nervous system, in patients who received Tysabri®.

Subsequently, as a result of Biogen's and Elan's ongoing safety evaluation of Tysabri®, a previously diagnosed case of malignant astrocytoma was re-assessed as PML in a patient in an open label Crohn's disease clinical trial.

1.

Since the 10 March announcement, the Antisense Therapeutics team has successfully identified and selected a panel of leading world experts as members of its Medical Advisory Board with an immediate aim of providing Antisense Therapeutics with advice with respect to its MS product ATL1102. The Company believes that the quality of this advisory board reflects the MS community's keen desire to support the successful commercialisation of safe and effective drugs to treat MS. The establishment of the Medical Advisory Board also demonstrates Antisense Therapeutics' continued commitment to ATL1102 and its potential as a MS treatment.

The details of the eminent scientists and clinicians who are members of the advisory board are as follows:

- Professor Fred Lubin, MD, Professor of Neurology at the Mount Sinai School of Medicine, and Director of Corrine Goldsmith Dickinson Center for Multiple Sclerosis at Mount Sinai, New York, NY will serve as Chairman
- Professor Jerry Wolinsky, MD, Bartels Family Professor of Neurology, The University of Texas Health Science Center at Houston, Texas
- Professor Chris Polman, MD, Professor of Neurology at the Free University, Amsterdam, The Netherlands and Clinical and Scientific Director of the Multiple Sclerosis Centre at the VU Medical Centre in Amsterdam.
- Igor Koralnik, MD, President of Igor J. Koralnik, LLC, Associate Professor of Neurology at the Harvard Medical School, Boston MA. Dr Koralnik is a medical expert in neuroinfectious diseases such as PML.
- Stephen Reingold, PhD, President Scientific and Clinical Review Associates, New York, NY. Until recently Dr Reingold was Vice President, Research Programs, at the National MS Society, New York, NY.

The Company also expects to appoint a leading scientist in the area of adhesion molecule research (VLA-4 is a cell adhesion molecule) as a member of the Medical Advisory Board.

The Company plans to hold its first review meeting with its Medical Advisory Board in June 2005.

ATL1101 for Psoriasis: Proof of Concept trial in psoriasis patients on track

The Proof of Concept study of ATL1101 in patients with mild to moderate psoriasis is proceeding to schedule. The study is now fully enrolled and dosing has commenced in all patients.

ATL1101 is being developed as a topical cream and is designed to block the synthesis of the IGF-I receptor, a protein involved in the regulation of cell growth in psoriasis.

The Proof of Concept study (a microplaque assay) will examine the effects of this topical cream applied once every two days over a one month period. The study is a double blinded, within-patient (plaque) randomised, placebo controlled trial, testing the efficacy of two different drug concentrations (or doses) of ATL1101.

As originally forecast, the study is expected to be completed mid-year with analysis of results from the study to be reported in Q3 2005.

The Proof of Concept study of ATL1101 in psoriasis patients is supported by a Commonwealth Government R&D Start grant.

Product Development Pipeline

Antisense Therapeutics is focusing on projects that target growth and vision disorders and major inflammatory diseases.

ATL1102 for Asthma

The Company has previously reported encouraging results achieved in an animal model of asthma with the inhaled form of an antisense compound targeting the VLA-4 molecule.

These experimental studies showed that delivery of an antisense drug against VLA-4 via inhalation to the lung significantly suppressed the key asthma indicators in allergen sensitised mice at very low inhaled doses, pointing to a potential new indication for ATL1102 as an inhaled treatment for asthma.

This data was presented at the Annual Scientific Meeting of the Thoracic Society of Australia and New Zealand in March of this year. Data will also be presented at the American Thoracic Society meeting in San Diego, USA on 22 May 2005.

Inhaled asthma medicines delivered directly to the lung generally result in lower levels of drug in the systemic (whole body) circulation compared to those same drugs when administered orally to achieve a similar therapeutic outcome (e.g. VentolinTM). Reducing the amount of drug in the systemic circulation may result in a reduction in the associated systemic side effects.

Should ATL1102 be effective in asthma patients at low inhaled doses as experienced in our animal studies, inhaled ATL1102 may have a potential safety advantage over other asthma drugs currently in development targeting VLA-4 that are administered orally or by injection, however this would need to be confirmed in the appropriate human clinical trials.

Animal studies are ongoing to confirm the attractiveness of moving ATL1102 into development as an inhaled asthma treatment. The Company will need to complete specific animal toxicology and pharmacokinetics studies and human pharmacokinetics studies by the inhalation route before undertaking human clinical trials. The existing data package that has been developed to date on ATL1102 for MS (an injection formulation), including some animal toxicology studies and Phase I human studies, will also support the clinical development of ATL1102 as an inhaled drug in patients with asthma.

ATL1103 for Acromegaly, Sight Disorders (Diabetic Retinopathy and Macular Degeneration)

The Company previously reported that an antisense inhibitor of the growth hormone receptor produced definitive results in experimental mice by reducing levels of the hormone insulin-like growth factor-I in the blood, thereby confirming its potential as a treatment for diseases associated with excessive growth hormone action. These diseases include acromegaly (abnormal growth disorder of the organs, face, hands, feet), and sight disorders such as diabetic retinopathy and wet age-related macular degeneration.

Antisense Therapeutics currently has research underway to assess the effect of this compound, when injected subcutaneously, on neovascularisation (new blood vessel formation) in the eye by testing it in a retinopathy mouse model. Presently there are no therapeutic agents approved specifically for the treatment of diabetic retinopathy. Given the high unmet medical need for this disease the market potential for effective medicines is estimated to be several billion dollars.

The Company is also in the process of selecting an optimized human antisense lead compound for clinical development with a number of potential leads to choose from and expects to be able to select the most potent of these lead inhibitors from studies to be conducted in animals.

It is anticipated that the optimised lead will be selected before the end of this year after which the Company plans to place orders for bulk quantities of the active pharmaceutical ingredient, to be formulated into injectable product for use in pre-clinical safety studies.

4

About Antisense Therapeutics

Antisense Therapeutics Limited (ANP) is an Australian publicly listed biopharmaceutical company focusing on the creation, development and commercialisation of novel antisense therapeutics. Through its research partners, its strategy is to develop antisense drugs for diseases where there is a large unmet need. Antisense Therapeutics plans to commercialise its pipeline by entering into deals or other partnerships with major pharmaceutical companies once drugs are shown to be successful in pre-clinical and/or clinical testing.

What is Antisense Technology?

Antisense drugs are synthetic RNA-like and DNA-like compounds designed for use as medicines, which block disease processes by targeting messenger RNA with extraordinary precision. Unlike conventional small-molecule medicines, the discovery of which requires time-consuming and laborious trial-and-error, antisense medicines are rationally designed by directly exploiting the huge body of genetic information now available from the human genome project. Compared to conventional drugs antisense aims to provide faster, more predictable drug discovery, with increased specificity of action and uniformity of methods of manufacture, formulation and delivery.

About MS

MS is a life long chronic disease that progressively destroys the central nervous system. It affects approximately 400,000 people in North America where the estimated cost of the disease is more than USD\$2.5 billion. It is a disease that affects more women than men, with onset typically occurring between 20 and 40 years of age. Symptoms of MS may include vision problems, loss of balance, numbness, difficulty walking and paralysis. In Australia MS affects over 15,000 people and worldwide MS may affect more than one million people.

About Psoriasis

Psoriasis is a chronic, non-contagious skin disorder which affects 2% of the population. While the precise cause is unknown, it is thought to be triggered by an immune system disorder leading to excessive skin cell division. Severity varies with around 75% of psoriasis cases classified as mild to moderate. The worldwide market for psoriasis treatments is more than \$US 500 million and there is an acknowledged unmet medical need for more effective and safer treatments. The market is forecast to grow beyond \$2 billion with the emergence of new therapies.

About Asthma

Asthma is a chronic lung condition characterised by periodic episodes of airway inflammation and constriction resulting in wheezing, coughing, chest tightness and shortness of breath. The episodes typically occur in response to stimuli such as allergens, chemical irritants or low temperatures. Up to 1 in 4 children, and 1 in 10 adults will experience asthma symptoms at some time in their lives.

About Diabetic Retinopathy and Age Related Macular Degeneration (AMD)

Diabetic retinopathy and wet age-related macular degeneration (AMD) are two of the leading causes of vision loss. Over 5 million Americans aged 18 and older are affected by diabetic retinopathy. Around 12,000-24,000 patients with diabetic retinopathy lose their eyesight each year in the US alone. These conditions are caused by new blood vessel formation in the retina or macula (the central part of the retina). In diabetes, high blood glucose can cause oxygen deprivation, which can stimulate factors that induce additional blood vessels in the retina. In AMD similar factors are thought to stimulate blood vessel production in the macula. These new blood vessels may break and bleed into the eye leading to scarring within the eye. Whilst there are drugs to control diabetes, patients with Type I diabetes who have had their disease for more than 10 years have a 90% chance of developing retinopathy, and about 20% of patients with Type II diabetes will get the disease. Surgical ablative treatments such as photocoagulation (laser therapy) are available but are not completely effective, may cause partial vision loss, and can only be used a limited number of times.

About Acromegaly

Acromegaly is a serious chronic life shortening disease triggered by excess secretion of growth hormone (GH) by benign pituitary tumours. Oversupply of GH overstimulates liver, fat and kidney cells, through their GH receptors, to produce excess levels of Insulin-Like Growth Factor-I (IGF-I) in the blood manifesting in abnormal growth of the face, hands and feet, and enlargement of body organs including liver, kidney and heart. The primary treatments for acromegaly are to surgically remove the pituitary gland and/or drug therapy to normalize GH and serum IGF-I levels. In North America, Europe and Japan there are approximately 40,000 diagnosed acromegaly patients with about half requiring drug therapy. Drug treatment costs vary depending on dosage and frequency of administration ranging from A\$14,000-\$33,000 per patient per year.



23 May 2005

The Companies Section
The Australian Stock Exchange Limited
530 Collins Street
MELBOURNE VIC 3000

PRESENTATION OF ASTHMA DATA AT AMERICAN THORACIC SOCIETY MEETING: INHALED ANTISENSE DRUG TARGETING VLA-4

The company is pleased to announce that data from our studies on an inhaled antisense drug for asthma is being presented today at the American Thoracic Society Meeting in San Diego. The presentation entitled "Aerosol delivery of VLA-4 Specific Antisense Oligonucleotides Inhibits Airway Inflammation and Hyperresponsiveness in Mice" reports on our first studies with our advanced, second generation antisense drugs used in an inhaled form. As reported in December 2004, the inhaled VLA-4 antisense drug produced encouraging pharmacological benefit in one of the most widely used experimental models of asthma, the ovalbumin-challenged mouse model.

The paper is being presented by Dr Jeff Crosby, Assistant Director Inflammation Research at Isis Pharmaceuticals, Inc, the company's technology partner. The studies were conducted at Isis' research facility in Carlsbad, CA.

The American Thoracic Society Meeting is an important international forum for respiratory medicine, and the Antisense Therapeutics data on VLA-4 is being presented at the meeting along with two other papers on inhaled antisense from Isis. Inhaled antisense drugs appear to be active at very low inhaled doses in these studies, making antisense drugs an attractive option in the search for effective and safe asthma medicines.

Today's presentation can be viewed on our website at www.antisense.com.au.

Background Information

Asthma is a chronic lung condition characterised by periodic episodes of airway inflammation and constriction resulting in wheezing, coughing, chest tightness and shortness of breath. The episodes typically occur in response to stimuli such as allergens, chemical irritants or low temperatures. Up to 1 in 4 children, and 1 in 10 adults will experience asthma symptoms at some time in their lives.

ATL1102 is a second generation antisense inhibitor of CD49d, a subunit of VLA-4 (Very Late Antigen-4), and is currently in development as a treatment for MS. Antisense Therapeutics has an exclusive licence from Isis Pharmaceuticals to develop and commercialise ATL1102. In inflammation, white blood cells (leukocytes) move out of the bloodstream into the inflamed tissue, for example, the CNS in MS, and the lung airways in asthma. The inhibition of VLA-4 may prevent white blood cells from entering sites of inflammation, thereby halting progression of the disease. Inhibition of VLA-4 in animals has demonstrated positive effects on a number of inflammatory diseases such as MS. Several other VLA-4 inhibitors are in clinical development for inflammatory conditions.

About Antisense Therapeutics Limited

Antisense Therapeutics Limited (ASX: ANP) is an Australian publicly listed biopharmaceutical drug discovery and development company. ANP's mission is to create, develop and commercialise novel antisense pharmaceuticals for large unmet markets. Its two most advanced projects target Multiple Sclerosis (ATL1102), and Psoriasis (ATL1101).

ANP plans to commercialise its pipeline via licensing/collaboration agreements with major biotechnology and pharmaceutical companies.

ANP's major shareholders include Circadian Technologies Limited (ASX: CIR), Isis Pharmaceuticals Inc (NASDAQ: ISIS) and Queensland Investment Corporation.

Contact Information:

Website: www.antisense.com.au

Managing Director – Mark Diamond +61 3 9827 8999 Company Secretary – Natalie Korchev +61 3 9827 8999